



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,319	09/19/2003	Robert Edward Wilson	10030442-1	7914
57299 7590 12/22/2008				
Kathy Manke Avago Technologies Limited 4380 Ziegler Road Fort Collins, CO 80525			EXAMINER CHIEM, DINH D	
			ART UNIT 2883	PAPER NUMBER
			NOTIFICATION DATE 12/22/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

avagoip@system.foundationip.com
kathy.manke@avagotech.com
adrienne.barclay@avagotech.com

Office Action Summary

Application No.

10/666,319

Applicant(s)

WILSON ET AL.

Examiner

ERIN D. CHIEM

Art Unit

2883

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date 11/14/08
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Having reviewed applicant's remarks and in further search and reconsideration of the broad breath of claim 1, the examiner found new prior art of Yamaguchi that would at least read completely on claim 1. Furthermore, in view of prior art of Yamaguchi and the prior arts of record the examiner also withdrew the objected claims 4-5 for being allowable if rewritten in an independent form. New grounds of rejection are provided herein below and currently all pending claims 1-5, 7-9 are now rejected.

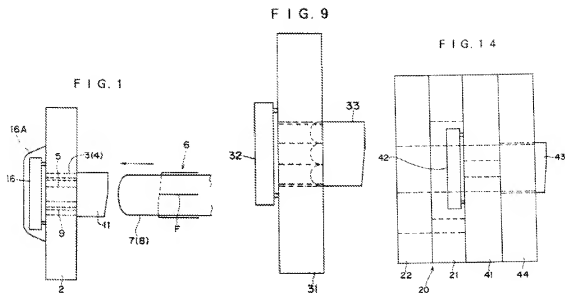
Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

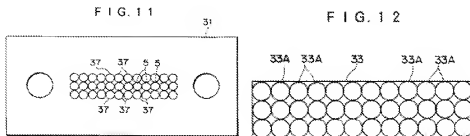
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 5 and 8-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamaguchi (US 5,917,976). Yamaguchi discloses an optical assembly comprising a package including an optoelectronic component (Fig. 9, element 32); an alignment feature mounted to the surface of the package (31); and a sleeve (33) defining only one bore (37) with an inner surface having a constant inner diameter for receiver and contacting outer surfaces of the alignment feature (microlens) and a ferrule of a fiber (31) of a fiber connector when the alignment feature and the ferrule are inserted into the bore at opposite ends of the bore so they can be aligned relative to each other (Fig. 9, 11 see also col. 13 line 30 to col. 14, line 25).



Claim 2, Yamaguchi disclose an optical assembly comprising a package including an optoelectronic component (32); an alignment feature mounted to a surface of the package (microlens); a sleeve defining only one bore (37) with an inner surface having a constant inner diameter; a fiber optic connector comprising a ferrule (31); wherein the alignment feature and the ferrule are inserted into the bore at the opposite ends of the bore so they can be aligned relative to each other (Fig. 9, 11 and see also col. 13 line 30 to col. 14, line 25).

Claim 5, the alignment feature comprises a solid partial sphere (see details in Fig. 9, the dotted lines) comprising transmissive material allowing a light emitted by the package to pass through, the outer surface of the solid partial sphere contacting the inner surface of the single bore of the sleeve (33A).



Claim 8, the package (16) is an optoelectronic chip enclosure

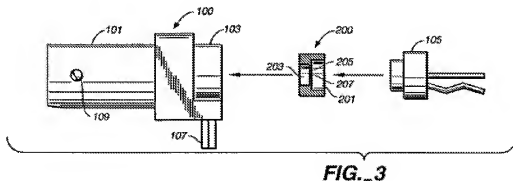
Claim 9, the optoelectronic component is a laser (Col. 11, lines 13-17 and lines 37-39).

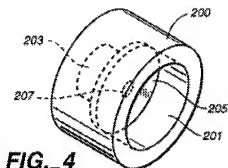
Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi in view of Freeman (US 5,195,156). Regarding claim 3, Yamaguchi discloses the invention of claim 1, however, Yamaguchi does not disclose the alignment feature comprises a cylindrical post having a hole allowing a light emitted by the package to pass through. Freeman discloses in Fig. 3 and 4





an alignment feature comprises a solid post (200) having a hole (207) allowing a light emitted by the package (105) to pass through. One having ordinary skill in the art would recognize the disclosure of Freeman would be modifiable to art of Yamaguchi. **The motivation** for providing a solid post having a transmissive bore hole is to reduce manufacturing cost since an accurate and refined lens cost more to produce than a cylindrical body having a bore hole.

Regarding claim 7, Freeman discloses the state of the art at the time of Freeman's invention utilizes the laser optoelectronic package in an ST type connector. Therefore, it would have been obvious to one having ordinary skill in the art to recognize Freeman's disclosure would be modifiable in the art of Yamaguchi since **the motivation** would be to provide an optoelectronic device that is capable of coupling with a standardized connector type such that the device may be universally apply in any application which requires an ST, SC, FC, or LC type connector. Well known standardized connector types are ST, SC, FC, LC etc. Please refer to Gruber Industries cable c connector reference page (<http://www.arcelect.com/fibercable.htm>).

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi in view of Gilliland et al.(US 6,416,238 B1). Yamaguchi disclose the invention of claim 1, however, Gilliland does not disclose the alignment feature comprises a solid post comprising a transmissive material allowing a light emitted by the package to pass through. Gilliland

discloses in Fig. 2 element 20 a transparent solid post which is mounted on the substrate (48) acting as a passive alignment feature wherein the sleeve 34 having a bore hole makes contact with the outer surfaces of the alignment feature. The light from the optoelectronic substrate would be transmissive through the transparent solid post (20). It would have been obvious to one having ordinary skill in the art to recognize the disclosure of Gilliland would be modifiable to the art of Yamaguchi since they both are in the same field of endeavor. **The motivation** a solid transmissive post would have been to make the device cost effective since the design is not greatly concerning confining light in a certain transmission wavelength of mode but only rather a light relaying means in which a solid post (20) as disclosed by Gilliland can be performed that would cost less than a refined collimating lens.

Response to Arguments

Applicant's arguments with respect to claims 1-5 and 7-9 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIN D. CHIEM whose telephone number is (571)272-3102. The examiner can normally be reached on Monday - Thursday 9AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Erin D Chiem/
Examiner, Art Unit 2883

/Frank G Font/
Supervisory Patent Examiner, Art Unit 2883

December 8, 2008
FGF/ec